

**AMENDMENTS TO THE CLAIMS:**

The current listing of the claims replaces all previous amendments and listings of the claims.

1. (Currently Amended) A machine based method comprising:  
searching a database for information about resources that may be used for participation in projects, the database containing time periods during which each of the resources is available, and amounts of resource participation for which the resources can be used for the projects, and attributes for each resource,  
wherein the projects require two or more resources to complete and the projects are comprised of a set of tasks, each individual task among the set of tasks requiring at least one qualifying attribute, selected from the attributes in the database, which that qualifies each resource to perform a given task in the project, the at least one qualifying attribute including at least one skill, at least one qualification, at least one level of experience, or at least one level of expertise;  
the searching comprising matching proposed amounts of resource participation, proposed time periods, and the at least one qualifying attribute of the resource with the available time periods, available amounts of resource participation, and available qualifying attributes stored in the database for each of the projects;  
identifying, based on the at least one qualifying attributes attribute necessary to complete each task of each project, available resources based on the matching;

determining a priority value for each of the projects by identifying an importance of the qualifying attributes and for the project through receiving an identification of the importance of one of the qualifying attributes to the project from a user; and

allocating resources to each project based on the identified resources necessary across all of the projects based on the available resources having the at least one qualifying attribute and the priority value of the project.

2. (Original) The method of claim 1 in which the resources comprise people.

3. (Original) The method of claim 1 in which the time periods during which each of the resources is available comprise availability.

4. (Original) The method of claim 1 in which the amounts of participation for which the resources can be used comprise utilization.

5. (Cancelled).

6. (Previously Presented) The method of claim 1 also including a selection by a planner of resources to be used for the projects, the selection being made from among the resources allocated to the project during the allocating of resources.

7. (Original) The method of claim 6 also including communicating with resources about the selection using a groupware program.

8. (Withdrawn) A machine-based method comprising enabling a project planner to identify a person to participate in a project that has time constraints on its completion, and in response to the identifying of the person, scheduling assignments for the person that are consistent with the time constraints of the project, the assignments being selectively either tentative assignments or committed assignments.

9. (Withdrawn) The machine-based method of claim 8 in which the scheduled assignments comprise assignments of specific time periods.

10. (Withdrawn) The machine-based method of claim 8 also including searching scheduled assignments to identify people available for assignment, the searching being arranged to treat people as unavailable at times when they are subject to scheduled fixed assignments.

11. (Withdrawn) The method of claim 10 in which the searching is also arranged to treat people as unavailable at times when they are subject to scheduled tentative assignments.

12. (Withdrawn) The method of claim 10 in which scheduled assignments for a person may exceed 100% of the working time of the person.

13. (Withdrawn) The method of claim 12 in which the scheduled assignments may exceed 100% of the working time of the person.

14. (Withdrawn) A machine-based method comprising maintaining a database of information about human resources of an enterprise including assignments of human resources to roles in projects being conducted by the enterprise, the database being managed by a workforce management application, and when assignments of human resources to roles in projects are made or changed in a project resource planning application that is distinct from the workforce management application, updating the human resources database to incorporate the information about the assignments.

15. (Withdrawn) The method of claim 14 in which the assignments comprise utilization and availability information with respect to the human resources of the enterprise.

16. (Withdrawn) The method of claim 14 also including receiving requests from users through the project resource planning application for information about availability and utilization of human resources, and based on the requests, automatically querying the human resources database.

17. (Withdrawn) The method of claim 14 also including making available, online to users within the enterprise, information about tasks of projects for which

human resources have not been scheduled, and receiving requests to schedule the users for the tasks.

18. (Withdrawn) A machine-based method comprising maintaining a common database of information about availability of resources of an enterprise for participation on projects of the enterprise, enabling project planners to search the database for resources for possible assignment to projects and to assign resources to projects, providing information about resources assigned to the projects from the common database to a groupware application to enable the groupware application to schedule the resources and alert the resources of the scheduling, and providing updated information about scheduling of the resources from the groupware back to the common database, and updating the common database based on the updated information.

19. (Withdrawn) The method of claim 18 in which enabling project planners to search the database includes receiving requests at an interface of a project resource planning application, and providing the requests to the common database of information.

20. (Withdrawn) The method of claim 18 in which the groupware application comprises Microsoft Outlook or Lotus Notes.

21. (Withdrawn) The method of claim 18 in which the assignments to projects are expressed as calendar tasks in the groupware application.

22. (Withdrawn) The method of claim 18 in which the resources comprise human resources.

23. (Withdrawn) The method of claim 18 in which the updated information about scheduling is entered by a user of the groupware application.

24. (Withdrawn) A machine-based method comprising maintaining information about a project of an enterprise, the information including assignments of human resources to roles associated with the project, and providing online reports of all roles and assignments of human resources to all roles for the project.

25. (Withdrawn) The method of claim 24 also including accumulating information about assignments of human resources to roles associated with multiple projects, and enabling a user to obtain online analyses of utilization and availability of human resources across the multiple projects.

26. (Withdrawn) A machine-based method comprising

receiving from a project planner, with respect to a project, identifications of project roles to be performed for a project, the project roles identifying attributes of human resources useful for performing at least a portion of the project, without limiting the identification to specific human resources.

27. (Withdrawn) The method of claim 26 in which the attributes comprise qualifying attributes that define qualifications of suitable human resources.

28. (Withdrawn) The method of claim 26 in which the attributes comprise capacitive attributes that define time constraints on suitable human resources.

29. (Withdrawn) The method of claim 26 in which the attributes for the project roles are defined by the project planner in connection with planning the project.

30. (Withdrawn) The method of claim 26 in which the project roles are defined as generic project roles and the project planner selects the project roles for the project from the generic project roles.

31. (Withdrawn) The method of claim 30 also comprising associating tasks of the project with respective ones of the identified project roles.

32. (Withdrawn) The method of claim 31 also including

enabling the project planner to identify specific human resources for at least some of the project roles in a manner that is independent of the identification of the project roles or the associating of tasks with roles.

33. (Withdrawn) The method of claim 26 also including enabling the project planner to identify specific human resources for at least some of the project roles in a manner that is independent of the identification of the project roles.

34. (Withdrawn) A machine-based method comprising presenting to a project planner a list of project roles needed for completing a project of an enterprise, and

enabling the project planner to enabling a project planner to assign tasks of the project to respective ones of the project roles without necessarily having specific human resources identified for each of the project roles.

35. (Currently Amended) A machine-based method comprising:  
enabling a project manager to search a database for specific human resources that may be used for participation in projects, the database containing time periods during which each of the human resources is available, and amounts of human resource participation for which the human resources can be used for the projects, and attributes for each resource,

wherein the projects require two or more resources to complete and the projects are comprised of a set of tasks, each individual task among the set of tasks requiring at least one qualifying attribute, selected from the attributes in the database, which that qualifies each resource to perform a given task in the project, the at least one qualifying attribute including at least one skill, at least one qualification, at least one level of experience, or at least one level of expertise;

the searching comprising matching proposed amounts of human resource participation, proposed time periods, and the at least one qualifying attribute of the human resource with the available time periods, available amounts of human resource participation, and available qualifying attributes stored in the database for each of the projects;

identifying, based on the at least one qualifying attributes attribute necessary to complete each task of each project, available human resources based on the matching;

determining a priority value for each of the projects by providing priority categories that identify an importance of the projects and receiving a selection of one of the priority categories from a user, the priority categories including at least selection of at least one qualifying attribute for a project; and

presenting a proposed allocation of human resources to the project manager for a the project based on the identified available human resources, and the priority value of the project, and the degree to which the identified available human resources possess the at least one selected qualifying attribute.

36. (Previously Presented) The method of claim 35 in which the attributes comprise qualifying attributes that define qualifications of the human resources.

37. (Original) The method of claim 35 in which the attributes comprise capacitive attributes that define time constraints on suitable human resources.

38. (Original) The method of claim 37 in which the capacitive attributes include availability or utilization.

39. (Previously Presented) The method of claim 35 also including enabling the project manager to identify the importance of respective qualifying attributes.

40. (Original) The method of claim 39 in which the importance can be identified as mandatory or optional for qualification purposes.

41. (Currently Amended) An apparatus for identifying and optimizing human resources in for use in business projects comprising:

a stored database containing information about resources that may be used for participation in projects, the database containing time periods during which each of the resources is available, and amounts of participation for which the resources can be used for the projects, and attributes for each resource;

an application that enables a project manager to search the stored database, to match proposed amounts of participation, and proposed time periods, and at least one

qualifying attribute possessed by a resource and necessary for a project with the time periods stored in the database, and amounts stored in the database, the attributes for each resource in the database, and to identify resources based on the matching, the at least one qualifying attribute including at least one of at least one skill, at least one qualification, at least one level of experience, and at least one level of expertise,

wherein the application identifies, based on qualifying attributes necessary to complete each task of each project, available human resources based on the matching, and

determines a priority value for each of the projects by identifying an importance of the qualifying attributes and for the project through receiving an identification of the importance of one of the qualifying attributes to the project from a user; and

a user interface that provides a project manager with a proposed allocation of human resources for a project based on the identified available human resources, and the priority value of the project, and the degree to which the identified available human resources possess the at least one selected qualifying attribute.

42. (Withdrawn) Apparatus comprising

means for enabling a project planner to identify a person to participate in a project that has time constraints on its completion, and

means for scheduling, in response to the identifying of the person, assignments for the person that are consistent with the time constraints of the project, the assignments being selectively either tentative assignments or committed assignments.

43. (Withdrawn) Apparatus comprising  
a stored database of information about human resources of an enterprise  
including assignments of human resources to roles in projects being conducted by the  
enterprise, the database being managed by a workforce management application, and  
a project resource planning application that is distinct from the workforce  
management application, that is configured to respond to assignments of human  
resources to roles in projects being made or changed, by updating the human resources  
database to incorporate the information about the assignments.

44. (Withdrawn) A medium bearing instructions to cause a machine to  
maintain a common database of information about availability of resources of an  
enterprise for participation on projects of the enterprise,  
enable project planners to search the database for resources for possible  
assignment to projects and to assign resources to projects,  
provide information about resources assigned to the projects from the common  
database to a groupware application to enable the groupware application to schedule  
the resources and alert the resources of the scheduling, and  
provide updated information about scheduling of the resources from the  
groupware back to the common database, and updating the common database based  
on the updated information.

45. (Withdrawn) A medium bearing instructions to cause a machine to

maintain information about a project of an enterprise, the information including assignments of human resources to roles associated with the project, and provide online reports of all roles and assignments of human resources to all roles for the project.

46. (Withdrawn) A medium bearing instructions to cause a machine to present to a project planner a list of project roles needed for completing a project of an enterprise, and

enable the project planner to enabling a project planner to assign tasks of the project to respective ones of the project roles without necessarily having specific human resources identified for each of the project roles.

47. (Currently Amended) A computer readable storage medium comprising instructions which when executed by a processor in a computer cause the computer to execute a method for identifying and optimizing human resources for use in business projects, the method comprising:

enabling a project manager to search a database for specific human resources that may be used for participation in projects, the database containing time periods during which each of the human resources is available, and amounts of human resource participation for which the human resources can be used for the projects, and attributes for each resource,

wherein the projects require two or more resources to complete and the projects are comprised of a set of tasks, each individual task among the set of tasks requiring at

least one qualifying attribute, selected from the attributes in the database, which that qualifies each resource to perform a given task in the project, the at least one qualifying attribute including at least one skill, at least one qualification, at least one level of experience, or at least one level of expertise;

the searching comprising matching proposed amounts of human resource participation, proposed time periods, and the at least one qualifying attribute of the human resource with the available time periods, available amounts of human resource participation, and available qualifying attributes stored in the database for each of the projects;

identifying, based on the at least one qualifying attributes attribute necessary to complete each task of each project, available human resources based on the matching;

determining a priority value for each of the projects by providing priority categories that identify an importance of the projects and receiving a selection of one of the priority categories from a user, the priority categories including at least selection of at least one qualifying attribute for a project; and

presenting a proposed allocation of human resources to the project manager for a the project based on the identified available human resources, and the priority value of the project, and the degree to which the identified available human resources possess the at least one selected qualifying attribute.